

Claire Schary's  
notes

# Best Practices for Water Quality Trading

## Joint Regional Agreement

---

### Interagency Workshop #3

August 21st & 22nd 2013

Boise Idaho

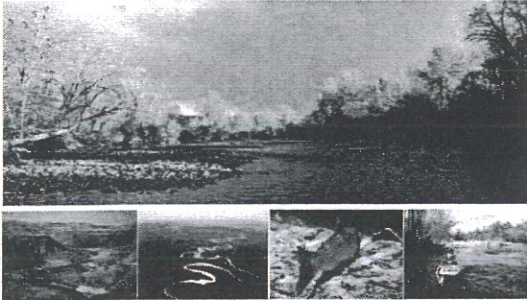


Claire Sibary's notes from  
Aug 21 meeting.

8/16/2013

### Building regional agreement on water quality trading

Day 1, Workshop # 3, August 21<sup>st</sup>, Boise



---

---

---

---

---

---

---

---

### Overview: Agenda

#### Day 1

#### Day 2

- Introductions & overview
  - Project site monitoring
  - BMP approval process and standards
  - Lunch
  - Adaptive management and monitoring
- Eat @ 7:30, Start @ 8:30
  - Day 1 Recap and mop-up
  - Permitting, compliance, monitoring
  - Lunch

---

---

---

---

---

---

---

---

### Overview: Workshop Objectives & Timeline

- Workshop 1 April 9-10 in Union, WA
  - Re-establish overall project goal
  - Discuss Guiding Principles for trading
  - Discuss Tier II—Eligibility criteria, data quality, and verification
- Workshop 2 June 4-5 in Union, WA
  - Review points of agreement from Workshop 1
  - Review TIER II
- April 16-17 in Union, WA
  - Review points of agreement from Workshop 1 & 2
  - Discuss TIER II and Monitoring compliance, implementation, and data
- Workshop 3 October in Union, WA
  - Remaining points of agreement
  - Monitoring and testing
  - Regional water quality

---

---

---

---

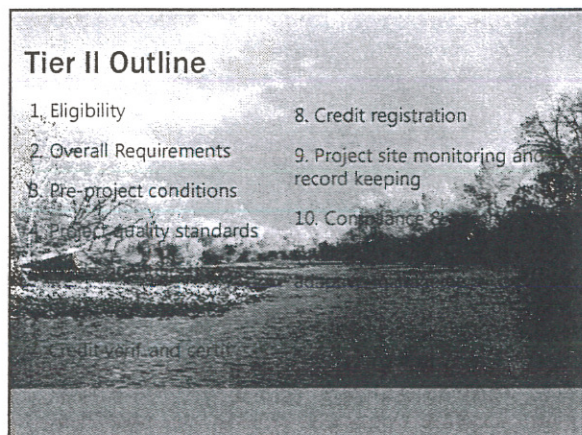
---

---

---

---





### Tier II Outline

1. Eligibility	8. Credit registration
2. Overall Requirements	9. Project site monitoring and record keeping
3. Pre-project conditions	10. Compliance
4. Project quality standards	11. Project site adaptive management
5. Credit verification and certification	

---

---

---

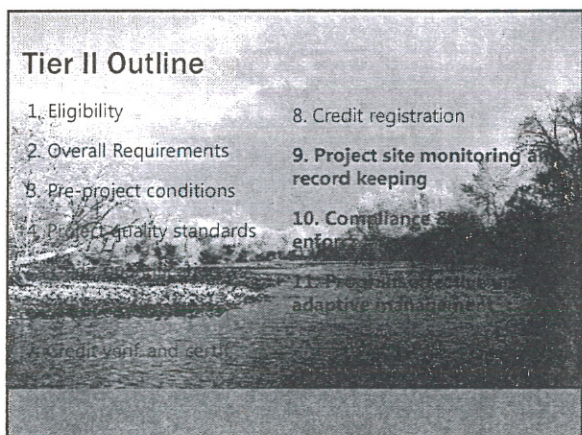
---

---

---

---

---



### Tier II Outline

1. Eligibility	8. Credit registration
2. Overall Requirements	9. Project site monitoring and record keeping
3. Pre-project conditions	10. Compliance
4. Project quality standards	11. Project site adaptive management
5. Credit verification and certification	

---

---

---

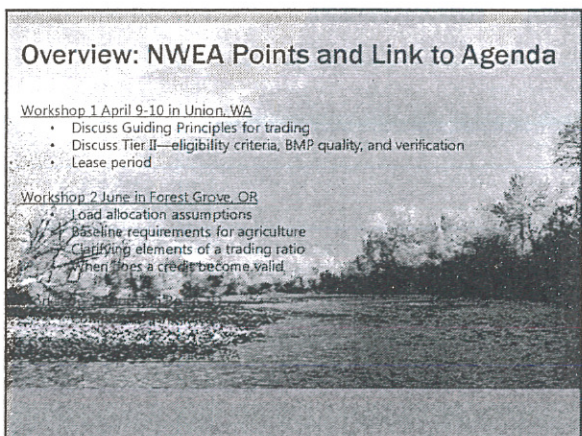
---

---

---

---

---



### Overview: NWEA Points and Link to Agenda

Workshop 1 April 9-10 in Union, WA

- Discuss Guiding Principles for trading
- Discuss Tier II—eligibility criteria, BMP quality, and verification
- Lease period

Workshop 2 June in Forest Grove, OR

- Load allocation assumptions
- Baseline requirements for agriculture
- Clarifying elements of a trading ratio
- When does a credit become valid

---

---

---

---

---

---

---

---

	Research & Option Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							
Tier 1 (Authorities)							
1. Eligibility							
2. Reserves, Ratios, & Baseline							
3. Pre-project conditions							
4. Project quality standards							
5. Credit quantification							
6. Credit characteristics							
7. Credit verifi. and certifi.							
8. Credit registration							
9. Project site monitoring and record keeping							
10. Permitting, compliance & enforcement							
11. Program effectiveness and adaptive management							
Joint Regional Agreement							

Complete
 Currently underway by WP/TF
 Upcoming tasks

We are currently working on :

- Finalizing the Guiding Principles,
- Revising Draft Best Practices from Workshop #1, &
- Developing Draft Best Practices from Workshop #2
- Workshop #3

Complete  
Currently underway by WP/TFT  
Upcoming tasks

We are currently working on:

- Finalizing the Guiding Principles,
- Revising Draft Best Practices from Workshop #1, &
- Developing Draft Best Practices from Workshop #2
- Workshop #3

	Research & Option Development	Discussion Guide	Interagency Processes	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							
1. Eligibility							
2. Reserves, Ratios, & Baseline							
3. Pre-project conditions							
4. Project quality standards							
5. Credit quantification							
6. Credit characteristics							
7. Credit verification and certification							
8. Credit registration							
9. Project site monitoring and record keeping							
10. Permitting, compliance & enforcement							
11. Program effectiveness and adaptive management							
Joint Regional Agreement							

Complete

Currently underway by WP/TFT

Upcoming tasks

By the October Workshop:

- Incorporating Round 2 comments on Draft Best Practices from Workshop #1
- Incorporating Round 1 comments on Draft Best Practices from Workshop #2
- Draft Best Practices from Workshop #3 for review

Complete  
Currently underway by WP/TFT  
Upcoming tasks

By the October Workshop:

- Incorporating Round 2 comments on Draft Best Practices from Workshop #1
- Incorporating Round 1 comments on Draft Best Practices from Workshop #2
- Draft Best Practices from Workshop #3 for review

	Research & Option Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							
1. Eligibility							✓
2. Reserves, Ratios, & Baseline							✓
3. Pre-project conditions							✓
4. Project quality standards							✓
5. Credit quantification							✓
6. Credit characteristics							✓
7. Credit verification and certification							✓
8. Credit registration							✓
9. Project site monitoring and record keeping							✓
10. Permitting, compliance & enforcement							✓
11. Program effectiveness and adaptive management							✓
Joint Regional Agreement							✓

Complete
 Currently underway by WPP/TFT
 Upcoming tasks

By November/December

Complete  
Currently underway by WP/TFT  
Upcoming tasks

By November/December



	Research & Option Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							
1. Eligibility							
2. Reserves, Ratios, & Baseline							
3. Pre-project conditions							
4. Project quality standards							
5. Credit quantification							
6. Credit characteristics							
7. Credit verif. and certif.							
8. Credit registration							
9. Project site monitoring and record keeping							
10. Permitting, compliance & enforcement							
11. Program effectiveness and adaptive management							
Joint Regional Agreement							

Complete  
Anticipated from agency staff  
Upcoming tasks

In September, we will be anticipating review of:

- Revised Draft Best Practices from Workshop #1, &
- Draft Best Practices from Workshop #2
- Meeting Summary from Workshop #3

	Research & Option Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							
1. Eligibility							
2. Reserves, Ratios, & Baseline							
3. Pre-project conditions							
4. Project quality standards							
5. Credit quantification							
6. Credit characteristics							
7. Credit verif. and certif.							
8. Credit registration							
9. Project site monitoring and record keeping							
10. Permitting, compliance & enforcement							
11. Program effectiveness and adaptive management							
Joint Regional Agreement							

Complete  
Anticipated from agency staff  
Upcoming tasks

In October, we will be anticipating review of:

- Draft Best Practices from Workshop #3
- Draft Agreement
- Materials for Workshop #4

	Research & Option Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Pilot Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							✓
1. Eligibility							✓
2. Reserves, Ratios, & Baseline							✓
3. Pre-project conditions							✓
4. Project quality standards							✓
5. Credit quantification							✓
6. Credit characteristics							✓
7. Credit verif. and certif.							✓
8. Credit registration							✓
9. Project site monitoring and record keeping							✓
10. Permitting, compliance & enforcement							✓
11. Program effectiveness and adaptive management							✓
Joint Regional Agreement							✓

Complete  
Anticipated from agency staff  
Upcoming tasks

November

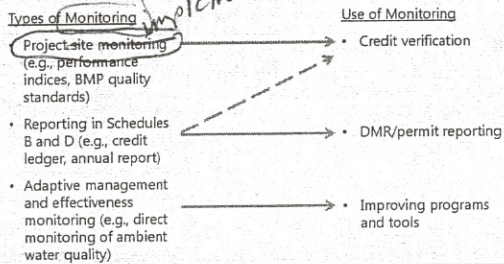
- Further refinement of reviewed materials



	Research & System Development	Discussion Guide	Interagency Discussion	Draft Best Practice Review			Final Best Practice
				Round 1	Round 2	Round 3	
Guiding Principles for Water Quality Trading							✓
Tier 1 (Authorities)							✓
1. Eligibility							✓
2. Reserves, Ratios, & Baseline							✓
3. Pre-project conditions							✓
4. Project quality standards							✓
5. Credit quantification							✓
6. Credit characteristics							✓
7. Credit verification and certif.							✓
8. Credit registration							✓
9. Project site monitoring and record keeping							✓
10. Permitting, compliance & enforcement							✓
11. Program effectiveness and adaptive management							✓
Joint Regional Agreement							✓

November/December

## Monitoring in Water Quality Trading Programs



*types*  
 Different ~~monitoring~~ of  
 'monitoring' → direct measurement  
 Contact Gary -  
 Wastewater Bureau  
 J.W.

## Tier II: Project Site Monitoring for Ongoing Verification

- Questions to consider:
  - Who is responsible? How often does it occur?
  - Should these be publicly available?
  - How long should they be retained?



*system*  
 Meeting quality standards for consistency in credit.



*Agglomeration*

## Tier II: Project Site Monitoring for Ongoing Verification

Who is responsible? What is included and how often does it occur?

Proposed default:

- Project Developer is responsible
- Conducted at least annually
- Comparison of site conditions to performance targets, any significant changes/concerns, and actions planned
- More or less often, as needed

Is this about right?

When is it reasonable to deviate?



## Tier II: Project Site Monitoring for Ongoing Verification

Should the reports be publicly available? How long do records need to be kept?

Proposed default:

- Monitoring data is available on the online, public registry
- Project Developer and Permittee retain for the compliance period and any additional recordkeeping requirements

Is this about right?

When is it reasonable to deviate?



*Should be same as permit / DM 2. retention figures.*

## Tier II: BMP review and acceptance

- BMP subgroup – gathering existing state processes, reviewing a draft process outline and checklist of BMP guideline components.

Basic Information	
Credit Calculation Method	
BMP Quality Standards	Suitability/Specific BMP Eligibility
	Design Criteria
	Monitoring
	Performance Standards
Credit Issuance Procedures	Contract Duration and Credit Disbursement
	Validation
	Credit Calculation Procedures
	Verification Procedures

*liability? NPA's permit role*

*Role of PS buyer/grower*

*Remaining in making sure backfilled?*

*Same issue of a table*

*field crop & sample result?*

*- Violation of WCA / law*

*but you can't reasonably control the natural processes*

*Frequency will depend on type of BMP*

*if natural will need*

*more frequent verification*

*Private / local / public*

*is a common problem*

*landmark - should*

*last only? it's so complicated, public is not to know if public & we say speak*

*process outline / how will*

*not collect records*

*a BMP effectiveness, but*

*environment what is best*

*Red / group / public*

*BMP group / not state*

*or watershed*

*→ Need to identify what is to be a minimum*



Public notice  
 & opportunity  
 for review  
 & comment.

8/16/2013

## Tier II: BMP review and acceptance

Draft Best Practice for BMP Review and Acceptance

- Provide a process for formal review and acceptance
  - Screening to filter inappropriate proposals, prioritize resources on most effective BMPs
  - Convene a review panel to evaluate a BMP package submitted by the proponent
  - Document approval



Agreeing my be the  
 over community/inform  
 farmers to eligible  
 practices.  
 Used BMPs approved by the state  
 be acceptable, but to  
 be able to / approved for each  
 watershed.

## Tier II: Adaptive Management and Effectiveness Monitoring

- Adaptive management helps us move forward with the best available, yet imperfect, science.
- A commitment to test assumptions through the collection and incorporation of new data as it comes to light



## Tier II: Adaptive Management and Effectiveness Monitoring

For water quality trading, this includes:

- 1) Improving trading program standards, protocols, and process;
- 2) Incorporating new information on quantification methods used; and
- 3) Evaluating whether the trading program is effective at meeting overall water quality goals

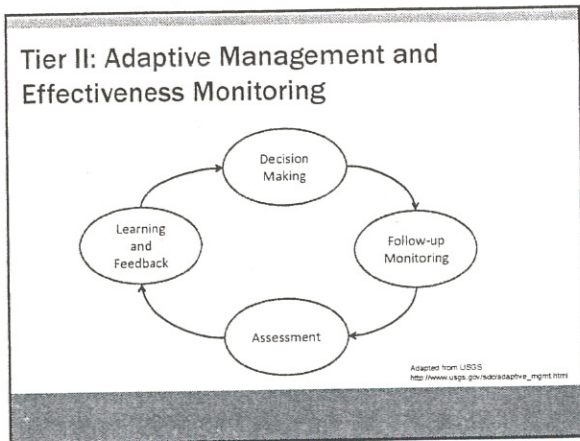


① exp. very high present & future  
 costs; ability to adapt to new  
 conditions  
 ② improvement to resources  
 ③ what WQT should be  
 be achieving what is  
 happening



fed Govt of TMDL is <sup>an American</sup> <sup>in WA</sup> <sup>1st</sup> <sup>best</sup> <sup>just</sup>  
 permit limits  
 They suggest more NPS <sup>and</sup> <sup>Agency</sup> <sup>Range</sup>

8/16/2013



**Looking forward: Pilot projects**

- What do we mean by pilot project?
- Which draft best practices are we most interested to pilot?
- What information do we want to learn from these projects?
- Where are opportunities and how do we initiate pilot testing in November?

**Looking forward: Form of the Agreement**

- What is the appropriate level of agreement formality through which to document the JRA work and the agency's opinions of it?
- Which aspects of the below example agreements seem to be most appropriate for documenting the JRA process and outcomes?
- What affirmative statements/ content would your agency want to see included?
- What are the deal breakers and what caveats would you need?
- What length of time should any statement/agreement cover?

Means <sup>key</sup> <sup>important</sup> <sup>in</sup> <sup>WA</sup>  
 in critical locations  
 targeted by TMDL - <sup>what</sup>  
 is <sup>what</sup> <sup>is</sup> <sup>the</sup> <sup>role</sup>?

Scale - <sup>scope</sup> <sup>matter</sup>  
 put out is outcome

What <sup>is</sup> <sup>the</sup> <sup>role</sup> <sup>in</sup> <sup>implementing</sup> <sup>TMDL</sup>  
 how to answer that?  
 Should be <sup>renewed</sup> <sup>regarding</sup>  
 for TMDL?

Sub-pilot project ideas:

- Want draft <sup>WDES</sup> <sup>permit</sup> <sup>language</sup>  
 authority <sup>truly</sup> - <sup>numbers</sup> <sup>a</sup>  
 line <sup>raise</sup>?

- <sup>flow</sup> <sup>agreement</sup> <sup>process</sup>  
 in <sup>WA</sup>?

What <sup>can</sup> <sup>for</sup> <sup>this</sup> <sup>type</sup>  
 Nov 2013 - Nov 2014  
 final and <sup>is</sup> <sup>the</sup> <sup>new</sup> <sup>2015</sup>  
 policy <sup>land</sup>

Statement of <sup>status</sup> <sup>needs</sup>  
 in Dec 2013?

Draft <sup>under</sup> <sup>by</sup> <sup>agency</sup>?

2 <sup>year</sup> <sup>non-binding</sup>  
 agreement <sup>of</sup> <sup>state</sup> <sup>affairs</sup>



## Examples: Informal Interstate Agreements

	Formality	Form of Documentation	Statements to be included	Caveats/Deal breakers	Time Period
Pilot Plan 1.0 Ohio Basin Project	Informal Agmt. Signed by states, endorsed by EPA & USDA	10 pgs of agmt. 26 pgs addenda (models, maps, templates, tools)	Agmt to support pilot projects framework for trading (definition, how standards met, model) registration and tracking for future agmt (terms)	No trade allowed causing exceedance of standards, impacting designated use, creating hot spots. Can't use to meet TSEL	1 year (2012-13)
Chesapeake Bay Nutrient Principles and Guidelines	Nonbinding guidance Endorsed by VA, MD, PA, DC, Chesapeake Bay Com.	1 page endorsement 33 pages guidance 44 pages appendices	Fundamental principles Framework (definitions, principles, and guidelines for reduction goals, eligibility, administration, accountability, assessing progress, involving stakeholders, recommended next steps. Appendices (public comments, team membership, definitions, ratios, tracking forms, implementation options)	Not intended to be binding or prescriptive Only serves as reference for states should they choose to pursue trading	Ongoing 2003-17
Joint Stmt of Agmt Ecosystem Credit Accounting System	Signed by OR Governor, OR agencies, nonprofits, cities, local agencies, POTW	Statement: 4 pages Promote: 89 pages	Agmt to test and pilot the Pilot General Credit Protocol: Willamette Basin Version 2.0 Methodologies for calculating credits, standardized credit approval, calculator, web-based tools, and online registry. Agmt to adapt credit estimates from pilot project with agency certification, commitment of agencies to streamline issuance process.	States will not circumvent existing requirements to first avoid and minimize impacts Credit estimates must not conflict with current agency credit issuance rules/statutes. Administrative rulemaking procedures must be followed where required to implement agreement	2 years 2009-2011

## Examples: Memoranda of Agreement

	Formality	Form of Documentation	Statements to be included	Caveats/Deal breakers	Time Period
MOU: Conservation Chesapeake Bay	Delaware, District of Columbia, Maryland, New York, Pennsylvania, Virginia, West Virginia, EPA	1 page	If WQS in Chesapeake not met by 2010, TMDL in 2011. Agmt to (1) work cooperatively to achieve reduction targets, (2) provide public participation process, and (3) collaborate on measures such as effluent trading, cooperative implementation mechanisms, expanded interstate agmt.	The agmt is to promote collaboration; no specific, actionable items were included or required of the signatories	8 years 2002-2010
Lower Boise Trading Demonstration MOU	Signed by Regional Admin. EPA Reg. 10, Director DEQ, Director State Soil Conservation Commission	7 pages Split into Objectives Background, Agreement, General Policies, Responsibilities, General Provisions	EPA and Idaho DEQ retained their role in review and oversight of records and sites. SCC conduct on-the-ground BMAP effectiveness monitoring to assess credit validity and verify performance; report non-compliance (e.g., contract breach or BMAP failure); remedy BMPs	EPA and DEQ retain full statutory/regulatory authority for WQS	5 years 2001-2006
Idaho DEQ and Idaho Dairyman's MOU	Signed by Idaho DEQ and Idaho Dairyman's Association	7 pages Split into Objectives Background, Agreement	Agmt to meet bi-annually to discuss and share data and analysis of the environmental impacts of Idaho dairy farms. Exchange comments and info on other agreements or use and collection of information. Includes schedule of meetings	Info exempt from disclosure is not to be shared. IDEQ cedes no trading authority	Ongoing 2012-7

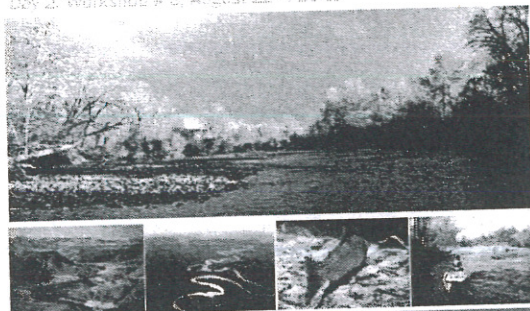
## Looking Forward: Joint Regional Agreement

	Formality	Form of Documentation	Statements to be included	Caveats/Deal breakers	Time Period
JRA Water Quality Trading	Binding or non-binding? Interstate Agreement or MOU? Signatures or endorsements?	General or specific? What goes in the Agreement, vs. Appendices?	Guiding principles? Best practices? Pilot Projects?	Disclaimer clarifying formality of doc? Is not to be shared. IDEQ cedes no trading authority	1 year (Pilot projects)? 2 years (Pilot projects and Revisions of best practices)?



# Building regional agreement on water quality trading

Day 2, Workshop # 3, August 22<sup>nd</sup>, Boise



Permit Discussion

NPDES sets limits to protect  
against nonpoint sources, but for  
point sources which are released  
Need to make sure how  
limits work for nonpoint sources  
occurred as well.

## Tier II: Permitting, Compliance, & Enforcement

5.1 National Pollutants Discharge  
Elimination System (NPDES) Permit

5.2 Schedule A - Effluent Limits

5.3 Schedule B - Monitoring

5.4 Schedule C - Compliance  
Schedules

5.5 Schedule D - Special Conditions

5.6 Schedule F - General Conditions

5.7 Compliance Determination and  
Appropriate Enforcement Actions



## Tier II: Permitting, Compliance, & Enforcement

5.1 National Pollutant Discharge  
Elimination System (NPDES) Permit

- Schedule A - Waste Discharge  
Limitations Not to be Exceeded

- Schedule B - Minimum Monitoring and  
Reporting Requirements

- Schedule C - Compliance Schedule

- Schedule D - Special Conditions

- Schedule E - Pretreatment Activities (as  
required for specific permittees)

- Schedule F - NPDES General Conditions  
- Domestic Facilities



Recommended that by permit  
holders in the group  
Take out for 'Schedule'  
Since every state calls it  
something else in their  
permit.




Flow based  
limit would be  
unpredictable  
at least some  
units need to be  
defined.  
with carbon  
sequestration  
# of credits needed  
in this sector  
is not clear  
if credits are needed  
in this sector  
if credits are needed  
in this sector

**Tier II: Permitting, Compliance, & Enforcement**

5.2 Schedule A – Effluent Limits

- Water Quality based Effluent Limitations – TMDL WLAs
- Option A – Entire Trading Program
- Option B – Credits needed




Levyage must articulate how the permittee can meet its limit w/ trade (something else).  
streamlined growth is recommendation to make it easier to understand.  
place holder in permit is Oregon's current growth - eg. recycled water to avoid relying on permit credits.  
breakdown of credits

Notes: specific concerns in permit styles or focused close to compliance deadline

**Tier II: Permitting, Compliance, & Enforcement**

5.3 Schedule B – Monitoring

- Monitor Compliance with Effluent Limitations
- Trading program
  - Option A Monitor credits generated
  - Option B Monitor site performance
  - Recommended Default



trade = what? be done on site? credit to be reported.  
DMR review covers permit actual discharge & credits used to meet limit.

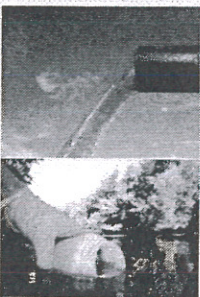
Annual report required?  
with project timeline?

change made based on day 1 discussion.

**Tier II: Permitting, Compliance, & Enforcement**

5.4 Schedule C – Compliance Schedules

- New more stringent WQBEL
- Time Needed to Comply
- Evaluate Capability of Permittee



Milestones at narrative limits are numerical options and analysis needs to be done but need to know if trading is the likely option before putting it in a permit, so that the compliance gets an early EPA compliance schedule. have been working on syn but larger facilities are becoming more common.



please schedule review of these last  
 2-11-11. Dredging can be specified  
 in any of the three options to track the  
 activity in the schedule but the  
 source must be the contract or fastest  
 schedule.

EPA, 11/15/12, TMDL 8/16/2013  
 New to EPA 11/15/12  
 better to call on the same  
 airport process.

## Tier II: Permitting, Compliance, & Enforcement

### 5.4 Schedule C - Compliance Schedules

- Option A - Permit notes entire schedule and contains first 5 years in permit
- Option B - Permit notes entire schedule and also includes separate administrative order
- Option C - Consent Order



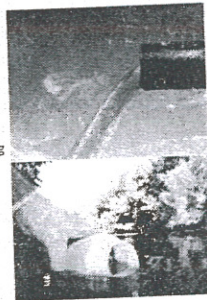
File y. TMDL in largest milestone  
 that permit into schedule  
 construct a compliance schedule  
 Variance in OR is not a precheck  
 + must be moved by EPA Council  
 w/ ES. (Hatch?)

→ Option A + B compliance schedule  
 description are the same -  
 B in Admin Order too -  
 B in OR is not - it's after  
 in the admin order  
 is compliance schedule

## Tier II: Permitting, Compliance, & Enforcement

### 5.5 Schedule D - Special Conditions

- Supporting Programs
- Trading Program
  - Option A - General Description of Trading Program
  - Option B - Detailed Trading Program Description
- Recommended Default

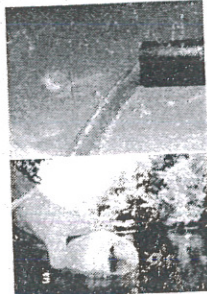


Does Permit if specifically deal  
 whether or not the system is  
 trading rule in place?  
 John has guidance but one  
 that is publicly vetted, it can be  
 referenced in the permit?

Otherwise provide detailed program  
 in Appendix A part

## Tier II: Permitting, Compliance, & Enforcement

- 5.6 Schedule F - General Conditions
- 5.7 Compliance Determination and Appropriate Enforcement Actions




---

---

---

---

---

---

---

---



## Roles of States and Others in Program Administration

### Determining Factors and Considerations:

- What key functions should be recommended or required?
- What time, cost, or expertise considerations should be made in determining whether and how functions are performed?
- What functions must be retained by states for CWA compliance?
- If functions are not formally delegated, how might this affect the public's ability to access information?
- How should information be collected from projects and data be housed?
- What categories of information or data collected should be disclosed upon public request? Which may be withheld, and how should requests be reviewed and determined?

## Roles of States and Others in Program Administration

### Validation:

Provides a review of project eligibility, project design and a description of how credits are calculated

### Recommended?

- If State –**
- Early review of projects allows agency to evaluate at the onset.
  - Allows project developer to choose to use the tool that may maximize benefit as well as lessen overall cost.

- If Third Party –**
- Some programs use a market administrator to conduct optional validations
  - Questions may arise regarding project eligibility that require independent discretion; some delegation of authority is likely needed.

### Required?

- If State –**
- Accurate validation requires comprehensive knowledge of trading rules, BMPs and protocols
  - Without validation, permittees may inaccurately assess project and incur additional costs.

- If Third Party –**
- Saves agency staff time; may save permittees time and money; third party must be familiar with protocols and standards
  - Questions may arise regarding project eligibility that require independent discretion; some delegation of authority is likely needed.

Based on what that report submitted on page 10 true (verified w/ on site visit at next App)

## Roles of States and Others in Program Administration

### Verification:

Provides a review of credit calculations for a project site and implementation of BMPs, and confirms site eligibility and stewardship

### Recommended?

- If State –**
- Recommending, but not requiring, verification would limit assurance that promised water quality benefits will be realized.
  - Ultimate liability rests with permittees. Additional exposure could discourage participation in trading.

- If Third Party –**
- Same as above.

### Required?

- If State –**
- Provides the highest level of control and assurance over how credits are generated and program standards are implemented.

- If Third Party –**
- May have greater flexibility than state in staffing and budgeting to respond to demand for verification on an annual basis.
  - Impartial oversight role may advance public confidence in trading programs.
  - May be more expensive than state or permittee performing verification.
  - Delegation of authority may promote uniformity and consistency in management of a program.



### Roles of States and Others in Program Administration

	Recommended?	Required?
<b>Certification:</b> Provides a final review of document completion	<b>If State –</b> <ul style="list-style-type: none"> <li>While it provides a QA/QC function, this step may not be necessary if verification is performed by the state and/or accurately performed by a third party.</li> </ul>	<b>If State –</b> <ul style="list-style-type: none"> <li>If the state does not perform verification, this step would provide agencies with a final review of documents prior to credit issuance.</li> <li>Certification is less time-intensive than verification, and would keep agencies informed of pending projects.</li> </ul>
	<b>If Third Party –</b> <ul style="list-style-type: none"> <li>Where third parties use independent verifiers, this step provides QA/QC on any issued reports or project eligibility determinations.</li> </ul>	<b>If Third Party –</b> <ul style="list-style-type: none"> <li>Again, may have greater flexibility in staffing and budgeting; impartial oversight role may advance public confidence in trading programs.</li> <li>May require some delegation particularly if third parties have the ability to approve or disapprove projects, post-completion.</li> </ul>

---

---

---

---

---

---

---

---

### Roles of States and Others in Program Administration

	Recommended?	Required?
<b>Registration:</b> Credits are issued to a buyer on a registry (e.g., online website, spreadsheet, or other central tracking system)	<b>If State –</b> <ul style="list-style-type: none"> <li>Recommending, but not requiring, registration of credits may make it administratively and practically difficult to track credits over time, ensure that credits are not sold multiple times to different buyers.</li> </ul>	<b>If State –</b> <ul style="list-style-type: none"> <li>States are likely in a position to be able to make a ledger available to the public at a limited cost. The state's maintenance of a registry would also provide stakeholders with access to consistent information that would otherwise be available through DMRS in a technology-based solution.</li> <li>Ongoing technical capacity and financial resources will be necessary to ensure that the registry is secure, and updated on a real-time basis.</li> </ul>
	<b>If Third Party –</b> <ul style="list-style-type: none"> <li>Same as above.</li> </ul>	<b>If Third Party –</b> <ul style="list-style-type: none"> <li>Third party maintenance of ledgers may carry higher transaction costs. However, third parties may have greater capacity to house and manage secure registries. To facilitate public access, some form of delegation may be required.</li> </ul>

---

---

---

---

---

---

---

---

### Workshop #4

- Continue support the development of pilot projects
- Revisit discussion of baseline
- Review draft agreement *Stallment*
- Packaging mechanisms that address risk and uncertainty

What other issues do we need to revisit?

What should we be working on to prepare for these?

---

---

---

---

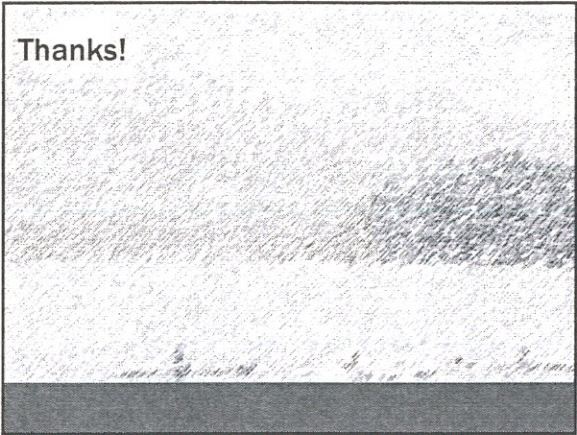
---

---

---

---





---

---

---

---

---

---

---